CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

BOARD ORDER NO. 98-012

WASTE DISCHARGE REQUIREMENTS FOR:

Desert Aggregates, Inc., Sacramento, California
Port Sonoma Marina Maintenance Dredging
Port Sonoma Marina, Sonoma County
One-Time Disposal to an Agricultural Field North of Highway 37

The California Regional Water Quality Control Board, San Francisco Bay Region (Regional Board), finds that:

1. Desert Aggregates, Inc. (hereinafter the Discharger), through its agent, Mike Cheney, submitted an application to dredge the waterways of Port Sonoma Marina (Figure 1) and discharge the dredged material to an agricultural field on a one-time (single episode) basis.

2. The Discharger proposes to dredge a total of approximately 240,000 cubic yards of recently deposited sediments using a cutterhead suction hydraulic dredge. The material would be transported by pipeline to a 120-acre settling basin (Figure 2) constructed on an agricultural field, dewatered and then tilled so that the field could continue to be used for agricultural purposes.

3. These requirements are for the discharge of return-flow water from dredge material handling and disposal operations.

4. The dredging is needed because the current depths in the marina require the boats be operated at high tides only. Maintenance dredging will restore safe depths for full time boat use. The dredging and disposal are to begin in early 1998 and the discharge location restored to agricultural use by November 1999.

5. The Discharger currently is subject to other Waste Discharge Requirements (Regional Board Order 96-012) for periodic discharge to three smaller settling ponds adjacent to the marina (approximately 30 acres total area). Under Order No. 96-012 the dredged material is transported to Redwood Landfill for use as daily cover, after dewatering and drying.

6. Due to a lull in dredging activities, the marina has collected a volume of dredged material that exceeds the capacity of the ponds regulated by Order No. 96-012. The Discharger has concluded that after a one-time dredging episode using the 120-acre settling basin, the smaller basins will be sufficient for ongoing maintenance dredging.

7. The 120-acre settling basin is one-quarter mile north of the marina on the north side of Highway 37. The property is subject to the requirements of the Sonoma Land Trust's agricultural preservation easement. Although the Discharger has purchased the property, it must be returned to agricultural use after this one-time disposal episode. After the dredged material has been pumped to the site, it will be held until the solids settle out, allowing the clarified effluent to be discharged into a drainage ditch that is pumped into the Petaluma River.

8. The existing beneficial uses of the waters of the Petaluma River as set forth in the Basin Plan are as follows:

    a. Cold Freshwater Habitat
    b. Marine Habitat
    c. Fish Migration
    d. Navigation
    e. Preservation of rare and endangered species
    f. Water Contact Recreation
    g. Non-contact Water Recreation
    h. Fish Spawning
    i. Warm Freshwater Habitat
    j. Wildlife Habitat

9. The Board, on June 21, 1995, adopted a revised Water Quality Control Plan (Basin Plan) which contains water quality objectives for surface and ground waters in the region, as well as discharge prohibitions intended to protect beneficial uses.

10. Effluent limitations in these requirements are based on the plans, policies, and water quality objectives of the Basin Plan, Quality Criteria for Water (EPA 440/5-86-001, 1986; Gold Book), Applicable Federal Regulations (40 CFR Parts 122 and 131), the National Toxics Rule (57 FR 60848, 22 December, 1992; NTR), and Best Professional Judgment.

11. The action to adopt waste discharge requirements for this facility is exempt from the provisions of the California Environmental Quality Act (CEQA), in accordance with Section 15304, Title 14, California Administrative Code.

12. The Regional Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge.

13. The Regional Board, in a public meeting, heard and considered all the comments pertaining to the discharge.

14. IT IS HEREBY ORDERED that Desert Aggregates, Inc, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. Discharge Prohibitions:

1. The direct discharge of wastes (including dredged sediment material) to surface waters or surface water drainage courses is prohibited.

2. The discharge shall not cause degradation of any water supply.

3. The dredged material shall remain within the designated disposal area at all times. The dredged material may be removed as soil after drying to a second disposal or reuse site, if approval is obtained from Regional Board Staff.

4. The dredge and disposal shall not cause a nuisance as defined in Section 13050(m) of the California Water Code.

B. Specifications

1. At no point within a containment area or cell shall the elevation of sediment exceed that of the levees, berms, or other containment structures. At least 2 feet of freeboard shall be maintained in the containment structures to avoid risk of levee failure.

2. The levee shall be adequately maintained to ensure that any standing water will not threaten to cause a levee failure.

3. Shallow groundwater at the site shall be returned to the current conditions or have a lower salinity than is currently found at the site.

C. Effluent Limitations

Return water discharged at the control weir shall not exceed the following limits at any time:

Table 1. Effluent Limitations

Constituent	Instantaneous Maximum Limit (ug/L)	Basis for Limitation
Arsenic	20	Basin Plan
Cadmium	10	Basin Plan
Chromium(VI)[1]	11	Basin Plan
Copper	20	Basin Plan
Cyanide	25	Basin Plan
Lead	5.6	Basin Plan
Mercury	1	Basin Plan
Nickel	7.1	Basin Plan
Silver	2.3	Basin Plan
Zinc	58	Basin Plan
Total Suspended Sediment	100 mg/L	Best Professional Judgment
Dissolved Sulfide	100	Best Professional Judgment
pH	6.5 - 8.5	Basin Plan

[1] The Discharger may, at its option, meet this limit as total chromium (Basin Plan - 1995 Basin Plan).

D. Receiving Water Limitations

1. The dredging and/or disposal of waste (i.e., sediments) shall not cause:

   a. Floating, suspended, or deposited macroscopic particulate matter or foam in waters of the State at any place more than 100 feet from the dredge or point of discharge of the return flow.

   b. Bottom deposits or aquatic growth in waters of the State at any place.

   c. Alteration of apparent color beyond present natural background levels in waters of the State at any place more than 100 feet from the dredge or point of discharge of the return flow.

d. Visible floating, suspended, or deposited oil or other products of petroleum origin in waters of the State at any place.

e. Waters of the State to exceed the following quality limits at any point:

Dissolved Oxygen	5.0 mg/l minimum When natural factors cause lesser concentrations, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
Dissolved Sulfide	0.1 mg/l maximum.
pH	A variation of natural ambient pH by more than 0.2 pH units.
Toxic or other deleterious substances	None shall be present in concentrations or quantities which may cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentrations.

2. Turbidity of the waters of the State at any point beyond the 100 feet of the discharge of the return flow shall not increase above background levels by more than the following:

Receiving Waters Background	Incremental Increase
<50 turbidity units	5 Units, maximum
50-100 turbidity units	10 units, maximum
>100 turbidity units	10% of background, maximum

3. The groundwater shall not be degraded as a result of the sediment disposal and handling operation.

E. Provisions

1. To comply with all of the Prohibitions, Specifications and Provisions of this Order the discharger shall meet the following compliance task and time schedule:

COMPLIANCE TASK AND DATES

Task 1:

The discharger shall provide an **Agricultural Restoration Plan**, which must be approved by the Executive Officer and prior to the initiation of dredging. This plan shall indicate the steps that will be taken to return the site to agricultural use. This should include a description of the soil preparation, monitoring to detect changes (soil salinity, yield, etc.), corrective actions (flushing, plowing, soil amendments, etc.) and follow-up actions to be taken when the site has been returned to productive agricultural use (levee removal).

REPORT DUE DATE: 14 days after approval of this Order.

Task 2:

The discharger shall provide financial assurance that the provisions of this Order will be complied with, including the restoration of the disposal/reuse site to productive agricultural use. These assurances must be approved by the Executive Officer prior to the initiation of dredging.

DUE DATE: 14 days after approval of this Order.

2. The discharge of silt, sand, soil, clay, or other earthen materials from dredging, construction or any other on-shore operation in quantities sufficient to cause deleterious bottom deposits or turbidity or discoloration in excess of natural background levels in surface waters is prohibited.

3. Dredging operations shall cease immediately whenever violations of requirements are detected through implementation of the Self-Monitoring Program (SMP) and operations shall not resume until alternative methods of compliance are provided. The discharger shall notify the Regional Board immediately whenever violations are detected and operations shall not resume until the Executive Officer of the Regional Board staff has approved the corrective action plan that will provide alternative methods of compliance.

4. The Discharger shall file with the Regional Board self-monitoring reports performed according to any Self-Monitoring Program issued by the Executive Officer.

5. All reports pursuant to these Provisions shall be prepared under the supervision of a registered civil engineer or certified engineering geologist.

6. Dust and odor from the dredged sediment disposal operations shall not cause a nuisance beyond the property boundaries.

7. The Discharger shall ensure that the foundation of the site, the levees surrounding the site, and the structures which control leachate, decant water, or surface drainage, are designed, constructed, and maintained to withstand conditions generated during the maximum probable earthquake. The discharger shall ensure that the levees are adequately maintained during any time that standing water is present in the containment area. The levees will be removed (brought down to grade) after the dredged material has been adequately flushed and the site returned to agricultural use.

8. The Discharger shall install any additional leachate monitoring devices required to fulfill the terms of any Self-Monitoring Program issued to the discharger in order that the Board may evaluate compliance with the conditions of this order.

9. The discharge of any hazardous waste as defined in Title 23, Division 3, Chapter 15 of the California Administrative Code, to the disposal site is prohibited. Only dredged material that has been demonstrated to be non-hazardous may be discharged to the disposal site.

10. The Discharger shall remove and relocate any wastes which are discharged at this site in violation of these requirements.

11. The Discharger shall file with this Regional Board a report of any material change or proposed change in the character, location, or quantity of this waste discharge. For the purpose of these requirements, this includes any proposed change in the boundaries of the disposal areas or the ownership of the site.

12. The Discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.

13. The property owner and site operator are considered to have full responsibility for correcting any and all problems which arise in the event of a failure which results in an unauthorized release of waste or wastewater.

14. The Discharger shall maintain all devices or designed features installed in accordance with this Order such that they function without interruption for the life of the operation.

15. Removal of the dried dredge material from this site for disposal or reuse shall be subject to the approval of the Executive Officer. This approval shall be based

upon a demonstration that the ultimate disposal will not cause a threat to water quality.

16. Discharge of the return water into the drainage ditch shall be at a flow rate that will not cause overtopping of the ditch above or below the discharge point.

17. The Discharger shall permit the Regional Board or its authorized representative, upon presentation of credentials:

    a. Entry on to the premises on which wastes are located or in which records are kept.

    b. Access to copy any records required to be kept under the terms and conditions of this Order.

    c. Inspection of any treatment equipment, monitoring equipment, or monitoring method required by this Order.

    d. Sampling of any discharge or surface water covered by this Order.

18. The Discharger shall comply with all applicable items of the attached "Standard Conditions and Reporting Requirements for Non-NPDES Wastewater Discharge Permits" dated August 1993.

19. These requirements do not authorize commission of any act causing injury to the property of another or of the public; do not convey any property rights; do not remove liability under federal, state, or local laws, or the regulations or rules of other programs and agencies. Nor does this Order authorize the discharge of wastes without appropriate permits from other agencies or organizations.

I, Loretta K. Barsamian, Executive Officer, do hereby certify that the foregoing is a full, complete and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on February 18, 1998.

Sincerely,

Loretta K. Barsamian
EXECUTIVE OFFICER

Attachments: A: Self Monitoring Program (SMP), Parts A and B

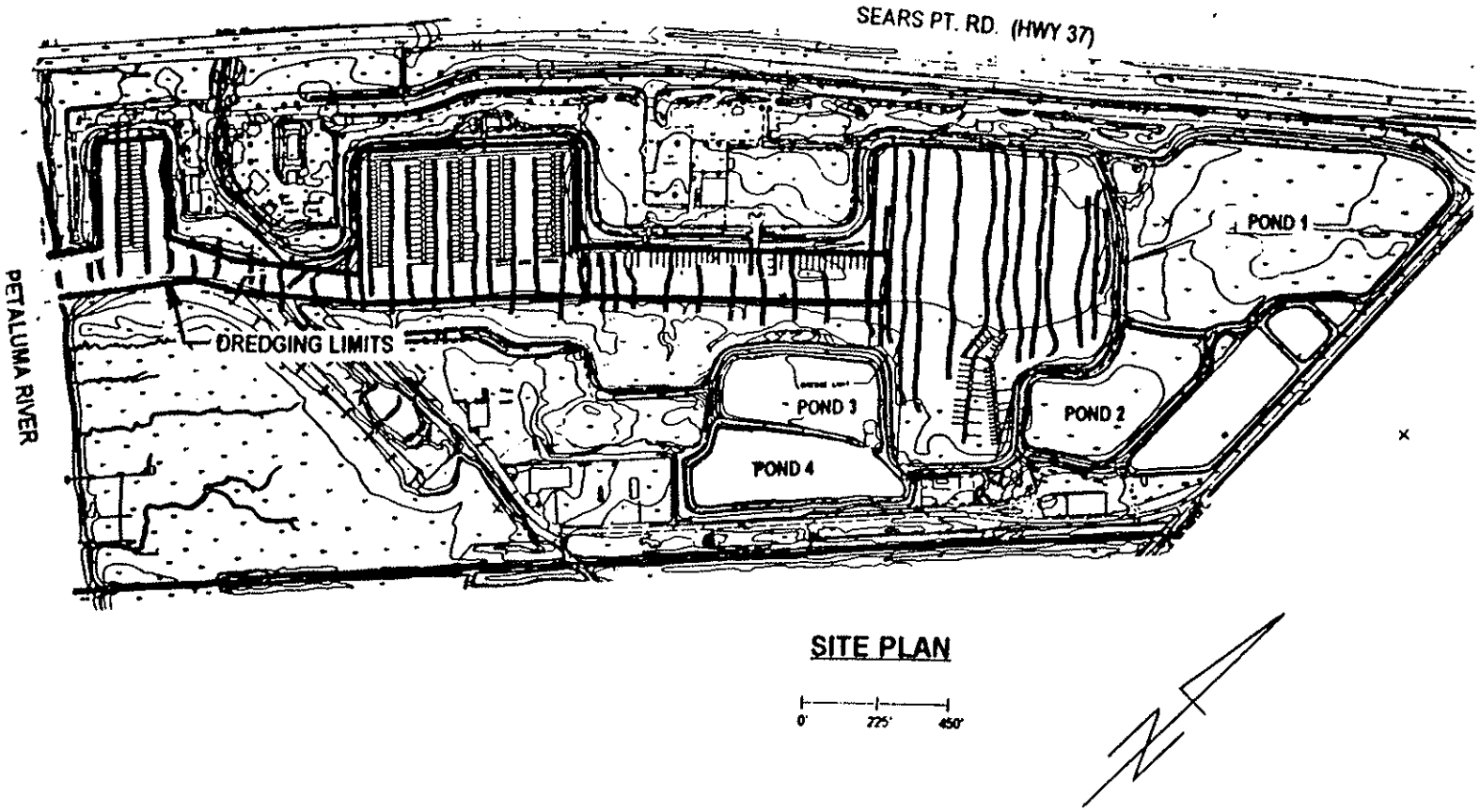
SEARS PT. RD. (HWY 37)
POND 1
DREDGING LIMITS
PETALUMA RIVER
POND 3
POND 2
POND 4
SITE PLAN
0'
225'
450'

Figure 1

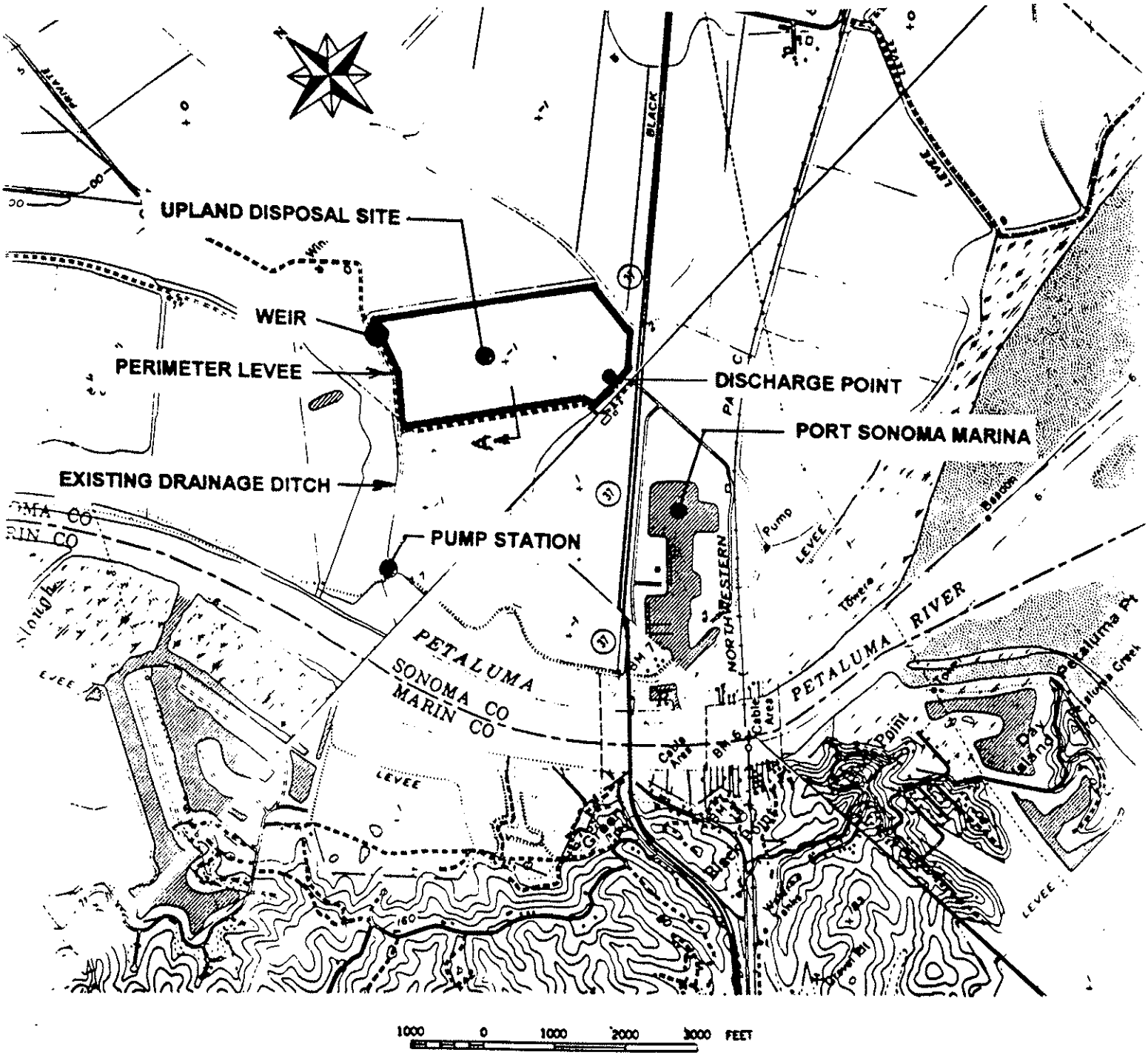
UPLAND DISPOSAL SITE
WEIR
PERIMETER LEVEE
EXISTING DRAINAGE DITCH
PUMP STATION
DISCHARGE POINT
PORT SONOMA MARINA
PETALUMA
SONOMA CO
MARIN CO
PETALUMA RIVER
NORTHWESTERN PACIFIC
LEVEE
1000 0 1000 2000 3000 FEET

Figure 2

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

DESERT AGGREGATES, INC., SACRAMENTO, CALIFORNIA

PORT SONOMA MARINA MAINTENANCE DREDGING

PORT SONOMA MARINA, SONOMA COUNTY

ONE-TIME DISPOSAL TO AN AGRICULTURAL FIELD NORTH OF HIGHWAY 37

ORDER NO 98-012

CONSISTS OF

PART A
(6 Pages)

AND

PART B
(4 Pages)

PART A

A. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No.73-16. This Self-Monitoring Program is issued in accordance with Provision 4 of Regional Board Order No. 98-012.

The principal purposes of a Self-Monitoring Program are:

1. to document compliance with waste discharge requirements and prohibitions established by the Board,

2. to facilitate self-policing by the waste discharges in the prevention and abatement of pollution arising from waste discharge,

3. to develop or assist in the development of standards of performance, and toxicity standards,

4. as appropriate, to assist the Dischargers in complying with the requirements of CCR Title 27, Chapter 3, Subchapter 3, Article 1 (formerly Article 5 of Chapter 15).

B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to the most recent version of EPA Standard Methods and in accordance with an approved sampling and analysis plan.

Water and waste analysis shall be performed by a laboratory approved for these analyses by the State of California. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. DEFINITION OF TERMS

1. A grab sample is a discrete sample collected at any time.

2. Receiving waters refers to any surface water which actually or potentially receives surface or groundwater, which pass over, through, or under waste materials or dredged sediment.

3. Standard Observations refers to the following information:

   a. Receiving Waters:

      i. Floating and suspended materials of waste origin: presence or absence, source, and size of affected area.
      ii. Discoloration and turbidity: description of color, source, and size of affected area.
      iii. Evidence of odors, presence or absence, characterization, source, and distance of travel from source.

   b. Perimeter of the containment facility:

      i. Evidence of liquid leaving or entering the containment area at any point, estimated size of affected area and flow rate (Indicate affected area on map).
      ii. Evidence of odors or dust, presence or absence, characterization, source, and distance of travel from source.
      iii. Evidence of erosion of stabilizing earthen berm(s).

   c. Foundation of facility:

      i. Evidence of surface cracks adjacent to disposal site.
      ii. Evidence of any excessive settlement of the disposal site.

4. Operations Monitoring refers to the following information:

   1. a description of and a map showing the area(s) dredged during the previous month.
   2. estimates of the daily volume in cubic yards and the disposal location(s) of dredged materials removed during each day of the previous month.
   3. estimates of the daily volume in gallons and the disposal location(s) of return water generated from the dewatering of the dredged material.

D. RECORDS TO BE MAINTAINED

Written reports shall be maintained by the Discharger or laboratory, and shall be retained for a minimum of five years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Board. Such records shall show the following for each sample:

1. Identity of sample and sample station number.

2. Date and time of sampling.

3. Date and time that analyses are started and completed, and name of the personnel performing the analyses.

4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used.

5. Calculation of results.

6. Results of analyses, and detection limits for each analysis.

E. REPORTS TO BE FILED WITH THE BOARD

1. Written monitoring reports shall be filed on a monthly basis after start up of the dredging. The reports shall contain the following:

   a. Letter of Transmittal

      A letter transmitting the essential points in each report should accompany each report. Such a letter shall include a discussion of any requirement violations found during the last report period, and actions taken or planned for correcting the violations. If the Discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred in the last report period this shall be stated in the letter of transmittal. Monitoring reports and the letter transmitting the monitoring reports shall be signed by a principal executive officer at the level of vice president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct.

b. Each monitoring report shall include a compliance evaluation summary. The summary shall contain:

   i. An estimation of the volume of the facility discharge on a daily, weekly and monthly basis.

   ii. The method and time of measurement, equipment and methods used to monitor field pH, temperature, Total Suspended Solids (TSS) and conductivity.

c. A map or aerial photograph shall accompany each report showing observation and monitoring station locations.

d. Laboratory statements of results of analyses specified in Part B must be included in each report, if appropriate. The director of the laboratory whose name appears on the laboratory certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Board.

   i. The methods of analyses and detection limits must be appropriate for the expected concentrations. Specific methods of analyses must be identified. If methods other than EPA approved methods or Standard Methods are used, the exact methodology must be submitted for review and approved by the Executive Officer prior to use.

   ii. In addition to the results of the analyses, laboratory quality assurance/quality control (QA/QC) information must be included in the monitoring report. The laboratory QA/QC information should include the method, equipment and analytical detection limits; the recovery rates; an explanation for any recovery rate that is less than 80%; the results of equipment and method blanks; the results of spiked and surrogate samples; the frequency of quality control analysis; and the name and qualifications of the person(s) performing the analyses.

f. A summary and certification of completion of all Standard Observations for the facility including the receiving waters, the perimeter of the containment facility, sediment-filled, perimeter containment bags and facility foundation.

g. A summary and certification of completion of all Operations Monitoring information.

2. CONTINGENCY REPORTING

a. A report to the Executive Officer shall be made by telephone of any accidental discharge of whatever origin from the dewatering facility immediately after it is discovered. A written report shall be filed with the Board within five days thereafter. This report shall contain the following information:

i. a map showing the location(s) of discharge(s);
ii. approximate flow rate;
iii. nature of effects; i.e. all pertinent observations and analyses; and
iv. corrective measures underway or proposed.

b. If any instantaneous maximum effluent limit is exceeded, within 24 hours of receiving the analytical results indicating the violation, a confirmation sample shall be taken and analyzed with 24 hour turn-around time. If the instantaneous maximum is violated in the second sample, the Discharger shall notify Regional Board staff immediately. The Executive Officer may order the discharge to be terminated, on a case-by-case basis.

3. FINAL REPORTING

The Discharger shall notify the Regional Board by letter upon completion of the project. Project completion is considered to be the date on which all dredged material has been deposited at its final disposal location(s). The Discharger shall also submit a final report containing the following information:

a. A comprehensive discussion of the compliance record, and the corrective actions taken or planned, which were needed for compliance with the waste discharge requirements.

b. A comprehensive discussion of the effectiveness of the dredging techniques and dewatering methods employed during this project.

d. An estimate of the total volume of dredge material removed from each discrete site during the project and the total volume of material deposited at each disposal location.

e. An estimate of the total volume of decant water generated from dewatering of the dredged material.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

DESERT AGGREGATES, INC., SACRAMENTO, CALIFORNIA

PORT SONOMA MARINA MAINTENANCE DREDGING

PORT SONOMA MARINA, SONOMA COUNTY

ONE-TIME DISPOSAL TO AN AGRICULTURAL FIELD NORTH OF HIGHWAY 37

PART B

This portion of the Self Monitoring Program (SMP) contains terms and definitions specific to the permitted discharge.

I. DESCRIPTION OF SAMPLING STATIONS

A. RECEIVING WATERS (Figure Part B-1)

A1. Sampling point A1 shall be at the point of discharge to the receiving water.

B1. Sampling point B1 shall be within 100 feet downstream of the discharge to the receiving water. Sample to be taken at mid-depth of water column.

AU. Sampling point shall be at least 75 feet upstream of the discharge to the receiving water. Sample to be taken at mid-depth of water column.

II. LAND OBSERVATIONS

L1, L2, etc. Visual observations at points equidistant along the perimeter levee not to exceed 1,000 feet spacing.

III. GROUNDWATER OBSERVATIONS

G1,G2, G3 Soil samples for a Soil Salinity Report as an indicator of shallow groundwater conditions. This should include Exchangeable Sodium Potential, pH, %Saturation, Sodium Adsorption Ratio and reporting of major ions.

IV. SCHEDULE OF SAMPLING, ANALYSIS AND OBSERVATIONS

A. The following table is to be implemented as a principle part of the SMP and is written specifically for the discharge described in this permit.

	Stations A1 & AU	Station B1	Stations L1, L2, etc	Stations G1, G2, G3
Type of sample	Grab	Grab	Observations	Soil Sample
Total Suspended Solids	Weekly[1]	Weekly		
pH	Weekly	Weekly		
Dissolved Sulfide (mg/l)	Weekly	As needed[2]		
Dissolved Oxygen (mg/l)	Weekly	Weekly		
Temperature (°C)	Weekly	Weekly		
Turbidity (JTU)	Weekly	Weekly		
Standard Observations	Weekly	Weekly	Weekly	
Metals (As, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag, Zn)	Weekly during startup[3]			
Soil Salinity Report				Bi annual (Spring and Fall)

[1] Weekly after start of dredging and until all the water is discharged

[2] To be performed if D.O. drops below 5.0 mg/l at Station A1.

3 The discharger can request less frequent metals sampling after the first three rounds of sampling, if the Effluent Limits are consistently achieved.

I, Loretta K. Barsamian, Executive Officer, do hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedures set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 98-012.

2. Was adopted by the Board on February 18, 1998.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger, and revisions will be ordered by Executive Officer or Regional Board.

Loretta K. Barsamian
Executive Officer

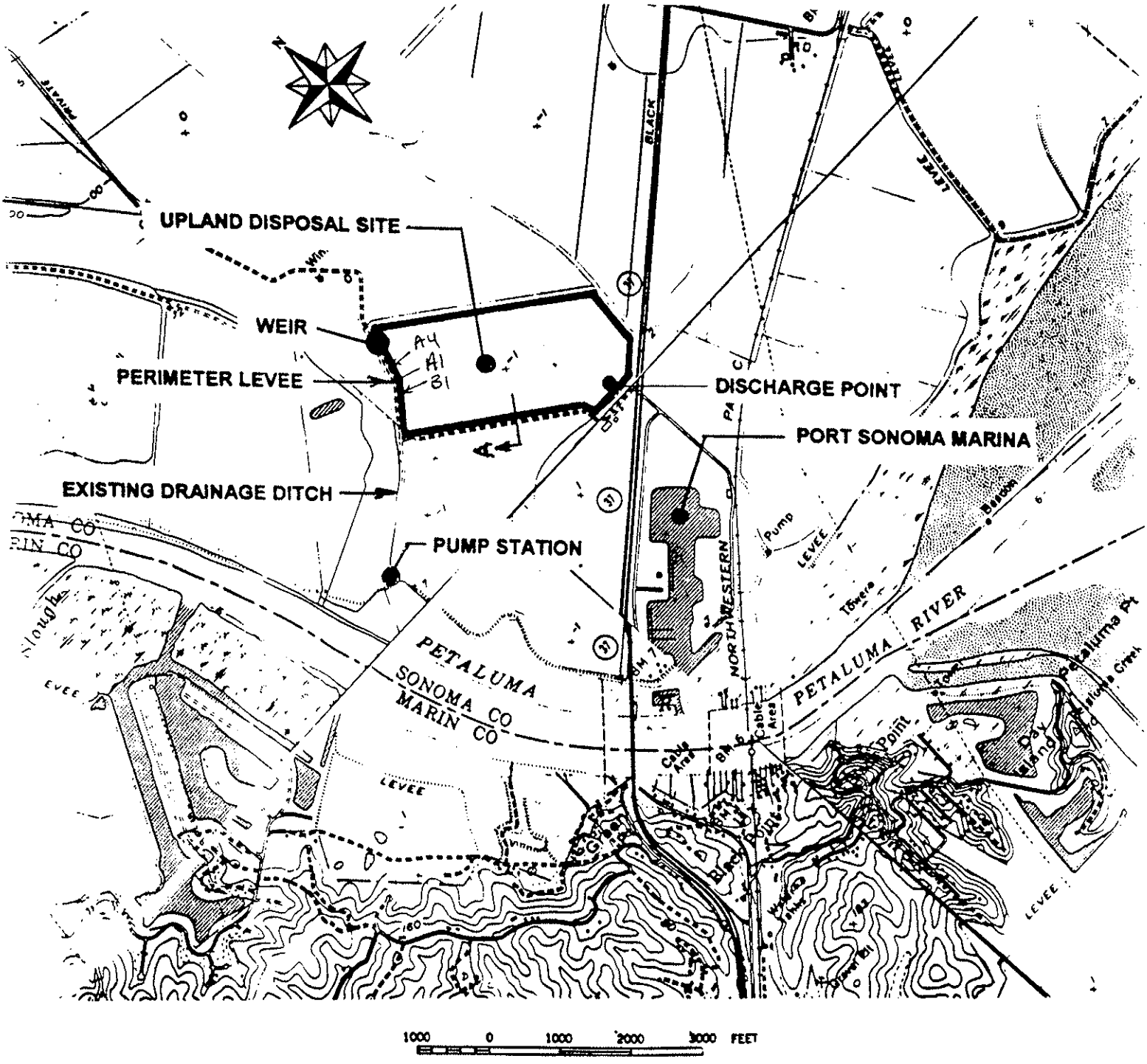

Figure Part B-1